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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,579	06/25/2003	Franck Badets	STMI07-02021	4869
23990	7590	11/20/2006	EXAMINER LAM, TUAN THIEU	
DOCKET CLERK P.O. DRAWER 800889 DALLAS, TX 75380			ART UNIT 2816	PAPER NUMBER

DATE MAILED: 11/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/603,579

**Applicant(s)**

BADETS ET AL.

**Examiner**

Tuan T. Lam

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 4-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 24 is/are rejected.
- 7) ☒ Claim(s) 2,3 and 25-32 is/are objected to.
- 8) ☒ Claim(s) 33-39 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### DETAILED ACTION

This is a response to the amendment filed 10/10/2006. Claims 1-3 and 24-39 are under examination. Claims 4-23 have been withdrawn from consideration.

#### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Martin et al. (US 2003/0016762). Figure 2 of Martin et al. shows a phase shifter circuit (circuit comprises all 202 elements) comprising an input for receiving an input signal (input signal to the first circuit 202 on the left hand side) having a specified oscillation frequency, an output delivering an output signal (output signal at the second or third or fourth 108A) having said specified oscillation frequency and having a variable phase shift with respect to said input signal, at least one control input receiving a control signal (202A) which controls the phase shift of said output signal with respect to said input signal, said control signal originating from a source (210) external to said variable phase-shifting circuit, and a synchronized oscillator (a plurality of circuits 202 circuits form a ring oscillator having output frequency similar to input frequency, thus anticipating the synchronized limitation) having at least a synchronization input coupled said input of said variable phase shifting circuit, at least one output coupled to said output of said output of the

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variable phase shifting circuit, said synchronized oscillator having a variable free running oscillation frequency controlled by said control signal (the oscillation frequency of the ring oscillator is being control by the control signal) as called for in claim 1.

Regarding claim 24, figure 2 of Martin et al. shows a phase shifter circuit (circuit comprises all 202 elements) comprising an input for receiving an input signal (input signal to the first circuit 202 on the left hand side) having a specified oscillation frequency, an output delivering an output signal (output signal at the fourth 108A) having said specified oscillation frequency and having a variable phase shift with respect to said input signal, at least one control input receiving a control signal (202A) which controls the phase shift of said output signal with respect to said input signal, said control signal originating from a source (210) external to said variable phase-shifting circuit, and a synchronized oscillator (a plurality of circuits 202 circuits form a ring oscillator having output frequency similar to input frequency, thus anticipating the synchronized limitation) having at least a synchronization input coupled said input of said variable phase shifting circuit and a second output (output signal at the third 108A) coupled to said output of the variable phase shift via the elements 202, said synchronized oscillator having a variable free running oscillation frequency controlled by said control signal (the oscillation frequency of the ring oscillator is being control by the control signal).

### ***Response to Arguments***

2. Applicant's arguments filed 5/18/2006 have been fully considered but they are not persuasive. Applicant argues that Martin reference fails to disclose the differential signals represent an input to the ring oscillator is not is not persuasive. Martin's figure 2 shows a ring oscillator having a plurality of circuits 202 forms a ring oscillator. The output signal at the

second or third or fourth terminal 108A has its phase shift relative to the input signal at the first differential 202. Since, the phase of the output signal is variably shifted by the control signal, thus, it anticipates the input signal being variably shifted limitation.

Applicant argues that Martin's fails to anticipates a "synchronized input" is not persuasive. As noted above, the input synchronizer is seen as the input to the first circuit 202 on the left hand side. The output signal is the signal at either the second or third or fourth terminal 108A. The output signal has the same frequency as the input signal. Therefore, Martin reference fully anticipates limitations of claim 1.

***Allowable Subject Matter***

3. Claims 2-3 and 25-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

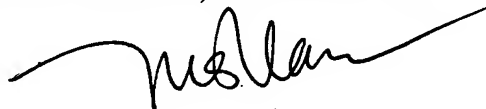
4. Claims 33-39 are presently allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Lam whose telephone number is 571-272-1744. The examiner can normally be reached on Monday to Friday (7:30 am to 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIMOTHY P. CALLAHAN can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Tuan T Lam  
Primary Examiner  
Art Unit 2816

10/07/2006